IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1.-11. (Cancelled)

12. (Currently Amended) A process comprising:

forming a metallization over a substrate;

forming a metal adhesion first layer above and on the metallization;

forming a metal second layer under conditions to impart a compressive stress therein above and on the metal adhesion first layer;

forming a metal third layer above and on the metal second layer;

forming a solder bump above and on the metal third layer, and

wherein the metal second layer comprises a copper and the metal third layer is selected from a group consisting of a refractory metal, a metal-doped refractory metal, and a refractory metal alloy.

13. (Original) The process according to claim 12, forming a metal adhesion first layer further comprising:

sputtering a composition over the metallization under conditions to impart a compressive stress in the metal adhesion first layer, wherein the composition is selected from Ti, TiW, W and Cr.

14. (Previously Presented) A process comprising:

forming a metallization over a substrate;

forming a metal adhesion first layer above and on the metallization;

sputtering a copper metal second layer above and on the metal adhesion first layer under conditions to impart a compressive stress therein;

forming a metal third layer above and on the copper metal second layer under conditions to impart a compressive stress therein, wherein the metal third layer is selected from a group consisting of a refractory metal, a metal-doped refractory metal, and a refractory metal alloy;

forming a solder bump above and on the metal third layer.

15. – 16. (Cancelled)

17. (Original) The process according to claim 12, further comprising:

forming an electrically conductive bump above and on the metal third layer.

18. (Currently Amended) A process comprising:

forming a copper pad over a substrate;

sputtering a Ti metal adhesion first layer above and on the copper pad;

sputtering a metal second layer under conditions to impart a compressive stress therein above and on the Ti metal adhesion first layer;

forming a metal third layer above and on the metal second layer;

forming a solder bump above and on the metal third layer, and

wherein the metal second layer comprises copper and the metal third layer is selected from a group consisting of a refractory metal, a metal-doped refractory metal, and a refractory metal alloy.

19. (Previously Presented) The process according to claim 18, wherein sputtering a Ti metal adhesion first layer above and on the copper pad comprises:

sputtering a Ti composition over the metallization, wherein the Ti composition has a thickness in a range from about 500Å to about 4,000Å.

20. (Cancelled)

21. (Currently Amended) A process comprising:

forming a copper pad over a substrate;

sputtering a Ti metal adhesion first layer above and on the copper pad;

sputtering a metal second layer under conditions to impart a compressive stress therein above and on the Ti metal adhesion first layer;

forming a metal third layer above and on the metal second layer;

forming a solder bump above and on the metal third layer,

wherein forming the metal third layer comprises:

sputtering a NiV composition over the metal second layer, wherein the NiV composition has a thickness in a range from 1,000Å to about 5,000Å, and wherein the metal second layer has a thickness in a range from about 1,000Å to about 5,000Å.

22. -28. (Cancelled)